

Appl. No. 10/806,520
Amdt. dated Feb. 23, 2006
Reply to Office action of Nov. 23, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A semiconductor device comprising:
a substrate having conductive interconnections;
two or more vertically stacked chips on said substrate, each supporting chip having a protective overcoat layer over a first surface and bond pads covered with bond pad caps;
metal standoffs having the same thickness as the bond pad caps disposed on the first surface, contacting the protective overcoat layer [[thereon]] to separate [[it]] the supporting chip from the next successive chip; and
a plurality of bond wires connecting at least one chip to said substrate.
2. (original) A semiconductor device as in claim 1, wherein said metal standoffs comprise aluminum islands.
3. (original) A semiconductor device as in claim 1, wherein the thickness of said metal standoffs is 5 to 20 kA.
4. (original) The semiconductor device of claim 1 wherein said standoffs are patterned over the chip passivation layer.
5. (original) The semiconductor device of claim 1 wherein said metal standoffs are thermally conductive.
6. (original) The semiconductor device of claim 1 wherein said metal standoffs are positioned within the area surrounded by bond pads.
7. (original) The semiconductor device of claim 1 wherein a polymeric adhesive secures the first chip to said substrate.
8. (original) The semiconductor device of claim 1 wherein bond wires connect more than one chip to said substrate.

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9. (original) The semiconductor device of claim 1 wherein said substrate is a BGA package substrate.
10. (canceled)
11. (original) The device of claim 1 wherein said supporting chips include copper bond pads having aluminum caps.
- 12-18. (canceled)
19. (new) The device of claim 1, further comprising a adhesive layer for securing the metal standoffs to the next successive chip.
20. (new) The device of claim 1 in which the metal standoffs and the bond pad caps have the same etched profile.

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